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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/003,189	10/29/2001	Damon John Ennis	423	4108
47372 7:	590 08/19/2005		EXAMINER	
BIRCH, STEWART, KOLASCH & BIRCH, LLP			WON, MICHAEL YOUNG	
8110 GATEHO SUITE 100 EA			ART UNIT	PAPER NUMBER
	.CH, VA 22042-1248		2155	
,			DATE MAILED: 08/19/200	5

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)					
	10/003,189	ENNIS ET AL.					
Office Action Summary	Examiner	Art Unit					
	Michael Y. Won	2155					
The MAILING DATE of this communication a	ppears on the cover sheet w	ith the correspondence address	,				
Period for Reply  A SHORTENED STATUTORY PERIOD FOR REP THE MAILING DATE OF THIS COMMUNICATION  - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a re - If NO period for reply is specified above, the maximum statutory perior - Failure to reply within the set or extended period for reply will, by state Any reply received by the Office later than three months after the mail earned patent term adjustment. See 37 CFR 1.704(b).	I. 1.136(a). In no event, however, may a eply within the statutory minimum of th d will apply and will expire SIX (6) MC ute, cause the application to become A	reply be timely filed  irty (30) days will be considered timely.  NTHS from the mailing date of this communicati  BANDONED (35 U.S.C. § 133).	tion.				
Status							
·=	·						
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
closed in accordance with the practice under	i Ex parte Quayle, 1955 C.	J. 11, 455 O.G. 215.					
Disposition of Claims	•						
4) ☐ Claim(s) 1-33 is/are pending in the application 4a) Of the above claim(s) is/are withdrest is/are allowed.  5) ☐ Claim(s) is/are allowed.  6) ☐ Claim(s) 1-33 is/are rejected.  7) ☐ Claim(s) is/are objected to.  8) ☐ Claim(s) are subject to restriction and	rawn from consideration.						
Application Papers							
9) The specification is objected to by the Examination The drawing(s) filed on is/are: a) and applicant may not request that any objection to the Replacement drawing sheet(s) including the correction.  The oath or declaration is objected to by the	ccepted or b) objected to ne drawing(s) be held in abeya ection is required if the drawin	nnce. See 37 CFR 1.85(a). g(s) is objected to. See 37 CFR 1.121	` '				
Priority under 35 U.S.C. § 119							
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority docume 2. Certified copies of the priority docume 3. Copies of the certified copies of the priority docume application from the International Bure * See the attached detailed Office action for a line	ents have been received.  ents have been received in riority documents have bee eau (PCT Rule 17.2(a)).	Application No n received in this National Stage					
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/0 Paper No(s)/Mail Date	Paper No	Summary (PTO-413) (s)/Mail Date Informal Patent Application (PTO-152) 					

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#### **DETAILED ACTION**

- 1. This action is in response to the application filed on October 29, 2001.
- 2. Claims 1-33 have been examined and are pending with this action.

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 3. Claims 1-33 are rejected under 35 U.S.C. 102(e) as being anticipated by Britton et al. (US 6,401,136 B1).

#### INDEPENDENT:

As per *claim 1*, Britton teaches a method, implemented by a communication coordinator on a module, for carrying out reliable communication in a communication system, comprising:

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receiving a message from a sender (see col.2, line 66-col.3, line 4) intended for one or more applications (see col.3, lines 32-34), said message comprising a message identifier (see col.3, lines 4-10);

determining based upon said message identifier whether said message had previously been received (see col.10, lines 33-36); and

in response to a determination that said message had previously been received, foregoing delivery of said message to said one or more applications (see col.10, lines 37-41).

As per *claim 12*, Britton teaches an apparatus for implementing reliable communication in a communication system, comprising:

a mechanism for receiving a message from a sender (see col.2, line 66-col.3, line 4) intended for one or more applications (see col.3, lines 32-34), said message comprising a message identifier (see col.3, lines 4-10);

a mechanism for determining based upon said message identifier whether said message had previously been received (see col.10, lines 33-36); and

a mechanism for foregoing, in response to a determination that said message had previously been received, delivery of said message to said one or more applications (see col.10, lines 37-41).

As per *claim 23*, Britton teaches a computer readable medium comprising instructions which, when executed by one or more processors, cause the one or more processors to implement reliable communication in a communication system, said computer readable medium comprising:

instructions for causing one or more processors to receive a message from a sender (see col.2, line 66-col.3, line 4) intended for one or more applications (see col.3, lines 32-34), said message comprising a message identifier (see col.3, lines 4-10);

instructions for causing one or more processors to determine based upon said message identifier whether said message had previously been received (see col.10, lines 33-36); and

instructions for causing one or more processors to forego, in response to a determination that said message had previously been received, delivery of said message to said one or more applications (see col.10, lines 37-41).

## **DEPENDENT:**

As per *claims 2, 13, and 24*, which respectively depends on claims 1, 12, and 23, Britton further teaches wherein said message identifier comprises a message sequence indicator, and wherein determining whether said message had previously been received comprises:

determining whether said message sequence indicator is one of the sequence indicators in a set of missing sequence indicators (implicit: see col.10, lines 33-41: any **missing** sequence number is a sequence number higher than the most recent committed sequence number); and

in response to a determination that said message sequence indicator is not one of the sequence indicators in said set of missing sequence indicators, concluding that said message had previously been received (implicit: see col.10, lines 33-41; if the

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"sequence number" is "less than or equal to" the "committed sequence number", then the message has been previously received since the "committed sequence number" is the largest received sequence number that is incremented and any **missing** sequence number is a sequence number higher than the most recent committed sequence number).

As per *claims 3, 14, and 25*, which respectively depends on claims 2, 13, and 24, Britton further teaches wherein determining whether said message had previously been received further comprises:

in response to a determination that said message sequence indicator is one of the sequence indicators in said set of missing sequence indicators, concluding that said message had not previously been received (see claim 2, 13, and 24 rejection above: any **missing** sequence number is a sequence number higher than the most recent committed sequence number); and

removing said message sequence indicator from said set of missing sequence indicators (see col.10, lines 45-48).

As per *claims 4, 15, and 26*, which respectively depends on claims 3, 14, and 25, Britton teaches of further comprising: in response to a determination that said message had not previously been received, delivering said message to said one or more applications (see Fig.2, step 120).

As per *claims 5, 16, and 27*, which respectively depends on claims 1, 12, and 23, Britton further teaches wherein said message identifier comprises a message sequence indicator, and wherein determining whether said message had previously

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been received comprises: accessing a receiving sequence indicator associated with said sender (see Fig.2, step 112); determining whether said message sequence indicator precedes said receiving sequence indicator in a predetermined sequence; in response to a determination that said message sequence indicator precedes said receiving sequence indicator in said predetermined sequence, determining whether said message sequence indicator is one of the sequence indicators in a set of missing sequence indicators; and in response to a determination that said message sequence indicator is not one of the sequence indicators in said set of missing sequence indicators, concluding that said message had previously been received (see claim 2, 13, and 24, and claim 3, 14, and 25 rejections above).

As per *claims 6, 17, and 28*, which respectively depends on claims 1, 12, and 23, Britton further teaches wherein said message identifier comprises a message sequence indicator, and wherein determining whether said message had previously been received comprises: accessing a receiving sequence indicator associated with said sender; determining whether said message sequence indicator is equivalent to said receiving sequence indicator; and in response to a determination that said message sequence indicator is equivalent to said receiving sequence indicator, concluding that said message had previously been received (see claim 2, 13, and 24, and claim 3, 14, and 25 rejections above).

As per *claims 7, 18, and 29*, which respectively depends on claims 1, 12, and 23, Britton teaches of further comprising: in response to a determination that said

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message had not previously been received, delivering said message to said one or more applications (see Fig.2, step 120).

As per *claims 8, 19, and 30*, which respectively depends on claims 7, 18, and 29, Britton further teaches wherein said message identifier comprises a message sequence indicator, and wherein determining whether said message had previously been received comprises: accessing a receiving sequence indicator associated with said sender; determining whether said message sequence indicator precedes said receiving sequence indicator in a predetermined sequence; in response to a determination that said message sequence indicator precedes said receiving sequence indicator in said predetermined sequence, determining whether said message sequence indicator is one of the sequence indicators in a set of missing sequence indicators; in response to a determination that said message sequence indicator is one of the sequence indicators in said set of missing sequence indicators, concluding that said message had not previously been received; and removing said message sequence indicator from said set of missing sequence indicators (see claim 2, 13, and 24, and claim 3, 14, and 25 rejections above).

As per *claims 9, 20, and 31*, which respectively depends on claims 7, 18, and 29, Britton further teaches wherein said message identifier comprises a message sequence indicator, and wherein determining whether said message had previously been received comprises: accessing a receiving sequence indicator associated with said sender; determining whether said message sequence indicator comes after said receiving sequence indicator in a predetermined sequence; and in response to a

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determination that said message sequence indicator comes after said receiving sequence indicator in said predetermined sequence, concluding that said message had not previously been received (see claim 2, 13, and 24 rejection above).

As per *claims* 10, 21, and 32, which respectively depends on claims 9, 20, and 31, Britton further teaches wherein determining whether said message had previously been received further comprises: in response to a determination that said message sequence indicator comes after said receiving sequence indicator in said predetermined sequence, determining whether there are any intervening sequence indicators between said message sequence indicator and said receiving sequence indicator; and in response to a determination that there is one or more intervening sequence indicators between said message sequence indicator and said receiving sequence indicator, adding said one or more intervening sequence indicators to a set of missing sequence indicators (see claim 2, 13, and 24, and claim 3, 14, and 25 rejections above).

As per *claims 11, 22, and 33*, which respectively depends on claims 9, 20, and 31, Britton further teaches wherein determining whether said message had previously been received further comprises: in response to a determination that said message sequence indicator comes after said receiving sequence indicator in said predetermined sequence, updating said receiving sequence indicator with said message sequence indicator (see Fig.2, step 116 and col.10, lines 45-50).

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### Conclusion

- 4. Claims 1-33 have been rejected.
- 5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Y. Won whose telephone number is 571-272-3993. The examiner can normally be reached on M-Th: 7AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached on 571-272-4006. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Michael Won

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August 16, 2005